Geological Engineering (B.S./M.S.)

Take the fast path to your master’s education with a combined degree program in geological engineering.

If you’re looking for the most efficient way to achieve a graduate-level education, choose a combined B.S. and M.S. program from UND. The Harold Hamm School of Geology & Geological Engineering offers access to unique laboratory research and an extensive samples library. Get training to become a highly-qualified geological engineer capable of conducting research and solving complex geological challenges.

Program Snapshot

Program type: Combined (Major and Master's)
Format: On-campus
Est. time to complete: 4-6 years
Credit hours: 155 (thesis option), 159 (non-thesis option)

Why Earn a Combined Degree in Geological Engineering at UND?

Success in geological engineering relies on a broad-based education with exposure to many kinds of environments and applications. Th UND geological engineering program offers all that and more in key areas related to petroleum and geothermal energy, mineral production, geoenvironmental concerns and natural hazards.

This combined program is focused on giving you the real-world expertise to:

- Solve practical problems in geological engineering with technical skills in geoscience, mathematics, computer modeling and poro-mechanics.
- Conduct independent research to advance the field and offer innovative solutions to technical problems in areas such as exploration and production of energy and mineral resources, geomechanics, hydrogeology, ground water remediation and site investigation.
- Be prepared for a career in industry, government or pave the way to a profession in teaching on your way to pursuing a doctoral degree.

How Combined Degrees Work

If you are an incoming freshman or transfer student, apply to UND and your program. As a current student, connect with your advisor to make sure you stay on track for the combined program. After your junior year, you can officially apply to the School of Graduate Studies. Complete the required courses, and you’ll earn both your B.S. and graduate degree at the same time.

Undergraduate Application Deadlines

FALL: FEB. 1* (FRESHMEN) | APRIL 15* (TRANSFER STUDENTS)
SPRING: DEC. 1
SUMMER: APRIL 1
*academic scholarship priority deadline

STUDENTS SEEKING THE COMBINED DEGREE MAY APPLY TO THE SCHOOL OF GRADUATE STUDIES AFTER COMPLETING 60 CREDITS.

Graduate Application Deadlines
Geological Engineering Overview

- Take advantage of an opportunity to extend your studies to include a graduate degree.
- Learn from a curriculum that incorporates geology with elements of civil, environmental, mining and petroleum engineering.
- Gain a broad background in physical and social sciences, humanities, communications, mathematics, geology and engineering.
- Learn through real-world experience such as cooperative work studies, internships, field research and laboratory projects.
- Gain access to a sample library with 80 miles of cores and approximately 40,000 boxes of drill cuttings of the Williston Basin, as well as an extensive collection of water well samples and cores.

Geological Engineering Careers

93K
Median salary range for a mining and geological engineer*

7%
The job outlook in this field is expected to grow by 7 percent through 2026, as fast as the average in all occupations.*

*U.S. Bureau of Labor Statistics

Top companies like Marathon Oil, 3M, Boston Scientific, Dow Chemical, Schlumberger, Intel, Energizer Battery, US Steel and many others have hired UND graduates. Some typical career opportunities include:

- Geologist petroleum engineer
- Environmental engineer
- Hydrogeologist
- Mining engineer
- Geotechnical engineer